



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,959	04/30/2001	Charu Aneja	RCA 90,192	4491
7590 03/08/2006				
JOSEPH S. TRIPOLI THOMSON MULTIMEDIA LICENSING INC. 2 INDEPENDENCE WAY P.O. BOX 5312 PRINCETON, NJ 08543-5312			EXAMINER TRAN, TRANG U	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/845,959	<b>Applicant(s)</b> ANEJA ET AL.	
	<b>Examiner</b> Trang U. Tran	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,11 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11 and 13-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/13/05:2/16/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 17, 2004 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed November 15, 2004 have been fully considered but they are not persuasive.

Applicants argue that Knox et al and Min et al, alone or in combination, do not teach or suggest the "using the first header set to only display the first pixmap region of the stored pixmap when the detected displaying mode is the first displaying mode...and using the second header set to only display the second pixmap region of the stored pixmap when the detected displaying mode is the second displaying mode" limitations of the amended independent claims because Knox et al appears to be directed toward a method and apparatus for generating OSD messages (e.g., Closed Captioning without increasing hardware requirements (e.g., increasing memory or bandwidth) when complicated video frames are received that require additional memory resources to be processed and Min et al discloses storing a single global header and an associated pixel map image in a memory.

The examiner respectfully disagrees. As discussed in the last Office Action, that Knox et al discloses using a first header set 310 to display a first region 352 when a first display mode (e.g., "Field Doubling" disabled) is detected and using a second header set 320 to display a second region 354 when a second display mode (e.g., "Field Doubling" enable) is detected and that, regardless of whether the field doubling mode is enabled or disabled for a given OSD region 352 or 354, all of the OSD regions 352 and 354 are displayed in a given frame 350.

Knox et al additionally discloses from col. 3, lines 45-67 that "Similarly, the OSD unit 150 uses the memory 140 to store the OSD bit map or the OSD specification. The OSD unit allows a user (manufacturer) to define a bit map for each field which can be superimposed on the decoded image. The OSD bit map may contain information which is stored in a storage device, e.g., a ROM, concerning the configuration and options of a particular consumer electronics product. Alternatively, the OSD bit map may contain information relating to Closed Captioning and channel logos that are transmitted from a cable television, a video disk and the like. An OSD bit map is defined as a set of regions (generally in rectangular shapes) of programmable position and size, each of which has a unique palette of available colors". From the above passage, it is clear that the user (manufacturer) can select the screen for the region 352 and different screen for region 354. When the user (manufacturer) selects one screen (frame) for region 352 and another screen (frame) for region 354, the first header set 310 of Knox et al is used to display a first region 352 when a first display mode is detected (one screen (frame) for region 352) and the second header set 320 of Knox et al is used to display a second

Art Unit: 2614

region 354 when a second display mode is detect (another screen (frame) for region 354 as required by independent claims.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 11 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Knox et al. (US Patent No. 6,480,238 B1).

In considering claim 1, Knox et al discloses all the claimed subject matter, note 1) the claimed storing a pixmap containing a plurality of pixel lines, said pixmap being large enough to encompass the first and second raster sizes is met by the OSD unit 150 (Fig. 1, col. 4, line 64 to col. 5, line 9), 2) the claimed storing a first header set pointing to a first pixmap region of the stored pixmap, the first pixmap region fitting the first raster size is met by the OSD bitstream (Fig. 2, col. 5, line 21 to col. 6, line 22), 3) the claimed storing a second header set pointing to a second pixmap region of the stored pixmap, the second pixmap region fitting the second raster size is met by the OSD bitstream (Fig. 2, col. 5, line 21 to col. 6, line 22), 4) the claimed detecting whether a displaying mode is in the first displaying mode or the second displaying mode is met by the processor 130 which detects the Field Doubling mode or Non-Field Doubling mode

Art Unit: 2614

(normal mode) (Figs. 3 and 4, col. 6, line 24 to col. 7, line 65), 5) the claimed using the first header set to only display the first pixmap region of the stored pixmap when the detected displaying mode is the first displaying mode is met by the OSD header 1 which located for OSD 1 region 352 (Fig. 3, col. 6, lines 24-39), and 6) the claimed using the second header set to only display the second pixmap region of the stored pixmap when the detected displaying mode is the second displaying mode is met by the OSD header 2 which located for OSD 2 region 354 (Fig. 3, col. 6, line 40 to col. 7, line 28).

Claim 11 is rejected for the same reason as discussed in claim 1.

In considering claim 16, the claimed wherein the first displaying mode and the second displaying mode display a different number of pixel lines and a different number of pixels in each of the displayed pixel lines is met by different regions 352 and 354 (Fig. 3, col. 6, line 24 to col. 7, line 27).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knox et al. (US Patent No. 6,480,238 B1).

In considering claim 17, Knox et al disclose all the limitations of the instant invention as discussed in claims 11 and 16 above, except for providing the claimed

Art Unit: 2614

wherein the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing 1920 pixels. Using the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing 1920 pixels is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing 1920 pixels into Knox et al's system in order to increase the flexibility of the system by displayed the OSD data in different aspect ratio.

In considering claim 18, Knox et al disclose all the limitations of the instant invention as discussed in claims 11 and 16 above, except for providing the claimed wherein the first displaying mode is 2H mode and the second displaying mode is 2.14H mode. Using the first displaying mode is 2H mode and the second displaying mode is 2.14H mode is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known the first displaying mode is 2H mode and the second displaying mode is 2.14H mode into Knox et al's system in order to increase the flexibility of the system by displayed the OSD data in different aspect ratio.

7. Claims 3, 13-15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knox et al. (US Patent No. 6,480,238 B1) in view of Min et al. (US patent No. 6,462,746 B1).

In considering claim 3, Knox et al disclose the claimed further comprising the steps of: chaining the headers in the first header set and chaining the headers in the second header set is met by the OSD region coordinates 214 which include a "next header pointer" 244 for pointing to the next header block in the memory 140 (Fig. 2, col. 5, lines 45-65). However, Knox et al explicitly does not disclose the claimed wherein the first and second header sets contain a plurality of headers. Min et al teach that Fig. 7 shows an OSD memory structure in a digital video display unit according to the present invention comprising a command area 100 including an OSD global header controlling information of multiple OSD regions displayed on a screen and OSD local headers 0-15 containing characteristic information of the OSD information (Fig. 7, col. 7, line 32 to col. 8, line 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the command area including an OSD global header and multiple OSD local headers as taught by Min et al into Knox et al's system in order to minimize a size of the memory occupied by the command and to allow an external host processor to control the command more effectively.

In considering claim 4, Knox et al discloses all the claimed subject matter, note 1) the claimed further comprising the steps of: using each of the headers in the first header set to point to one of the pixel lines in the pixmap in the first displaying mode is met by the OSD header 1 which located for OSD 1 region 352 (Fig. 3, col. 6, lines 24-39), and



Art Unit: 2614

2) the claimed using each of the individual headers in the second header set to point to one of the pixel lines in the pixmap in the second displaying mode is met by the OSD header 2 which located for OSD 2 region 354 (Fig. 3, col. 6, line 40 to col. 7, line 28).

In considering claim 5, the claimed further comprising the steps of: using each of the headers in the first header set to select a number of pixels in each of the pixel lines in the first displaying mode and using each of the headers in the second header set to select a number of pixels in each of the pixel lines in the second displaying mode is met by the OSD local header information (Fig. 8, col. 7, line 54 to col. 9, line 20) of Min et al.

In considering claim 6, the claimed wherein the first displaying mode and the second displaying mode display a different number of pixel lines and a different number of pixels in each of the displayed pixel lines is met by different regions 352 and 354 (Fig. 3, col. 6, line 24 to col. 7, line 27) of Knox et al.

In considering claim 7, the combination of Knox et al and Min et al disclose all the limitations of the instant invention as discussed in claims 1-6 above, except for providing the claimed wherein the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing 1920 pixels. Using the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing 1920 pixels is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known the first displaying mode displays 480

Art Unit: 2614

pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing 1920 pixels into the combination of Knox et al and Min et al's system in order to increase the flexibility of the system by displayed the OSD data in different aspect ratio.

In considering claim 8, the combination of Knox et al and Min et al disclose all the limitations of the instant invention as discussed in claims 1-6 above, except for providing the claimed wherein the first displaying mode is 2H mode and the second displaying mode is 2.14H mode. Using the first displaying mode is 2H mode and the second displaying mode is 2.14H mode is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known the first displaying mode is 2H mode and the second displaying mode is 2.14H mode into the combination of Knox et al and Min et al's system in order to increase the flexibility of the system by displayed the OSD data in different aspect ratio.

In considering claim 9, Knox et al discloses all the claimed subject matter, note 1) the claimed storing a pixmap containing a plurality of pixel lines, said pixmap being large enough to encompass the first and second raster sizes is met by the OSD unit 150 (Fig. 1, col. 4, line 64 to col. 5, line 9), 2) the claimed storing a first header set containing one header pointing to the first pixmap region of the stored pixmap, the first pixmap region fitting the first raster size is met by the OSD bitstream (Fig. 2, col. 5, line 21 to col. 6, line 22), 3) the claimed storing a second header set pointing to the second pixmap region of the stored pixmap, the second pixmap region fitting the second raster

Art Unit: 2614

size is met by the OSD bitstream (Fig. 2, col. 5, line 21 to col. 6, line 22), 3) the claimed detecting whether a displaying mode is in the first displaying mode or the second displaying mode is met by the processor 130 which detects the Field Doubling mode or Non-Field Doubling mode (normal mode) (Figs. 3 and 4, col. 6, line 24 to col. 7, line 65), 4) the claimed using the first header set to only display the first pixmap region of the stored pixmap when the detected displaying mode is the first displaying mode is met by the OSD header 1 which located for OSD 1 region 352 (Fig. 3, col. 6, lines 24-39), and 5) the claimed using the second header set to only display the second pixmap region of the stored pixmap when the detected displaying mode is the second displaying mode is met by the OSD header 2 which located for OSD 2 region 354 (Fig. 3, col. 6, line 40 to col. 7, line 28).

However, Knox et al explicitly does not disclose the claimed storing the second header set contain a plurality of headers.

Min et al teach that Fig. 7 shows an OSD memory structure in a digital video display unit according to the present invention comprising a command area 100 including an OSD global header controlling information of multiple OSD regions displayed on a screen and OSD local headers 0-15 containing characteristic information of the OSD information (Fig. 7, col. 7, line 32 to col. 8, line 30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the command area including an OSD global header and multiple OSD local headers as taught by Min et al into Knox et al's system in order

Art Unit: 2614

to minimize a size of the memory occupied by the command and to allow an external host processor to control the command more effectively.

Claims 13-15 are rejected for the same reason as discussed in claims 3-5, respectively.


Claim 19 is rejected for the same reason as discussed in claim 9.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT  
March 2, 2006



Trang U. Tran  
Examiner  
Art Unit 2614